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Contract No. MDA972-90-C-0074

**Monthly R&D Status Reports  
and Quarterly Technical Reports**

**3rd Quarter  
Calendar Year 1991**

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## Monthly R&D Status Reports and Quarterly Technical Reports

### 3rd Quarter Calendar Year 1991

Statement A per telecon Ltc Stephen Cross  
DARPA/SISTO  
Arlington, VA 22203-1714

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# 11 July IPR Agenda

- TRANSCOM Update ( Ragler, McCormack)
- PACOM Refinement Conference Report (Snow, Wilson) (10)
- Build 2 Status (Estrada) (5)
- Build 2 Testing, and Documentation Status (Mosley) (30)
- Build 3 Approach and Overview (Estrada) (5)
- Build 3 Design (Ton, Tiffany, Berliner) (50)
- A Brief Overview of the DART Fielding Effort (estrada) (10)
- Management, Financial Status, Schedule (Estrada) (10)

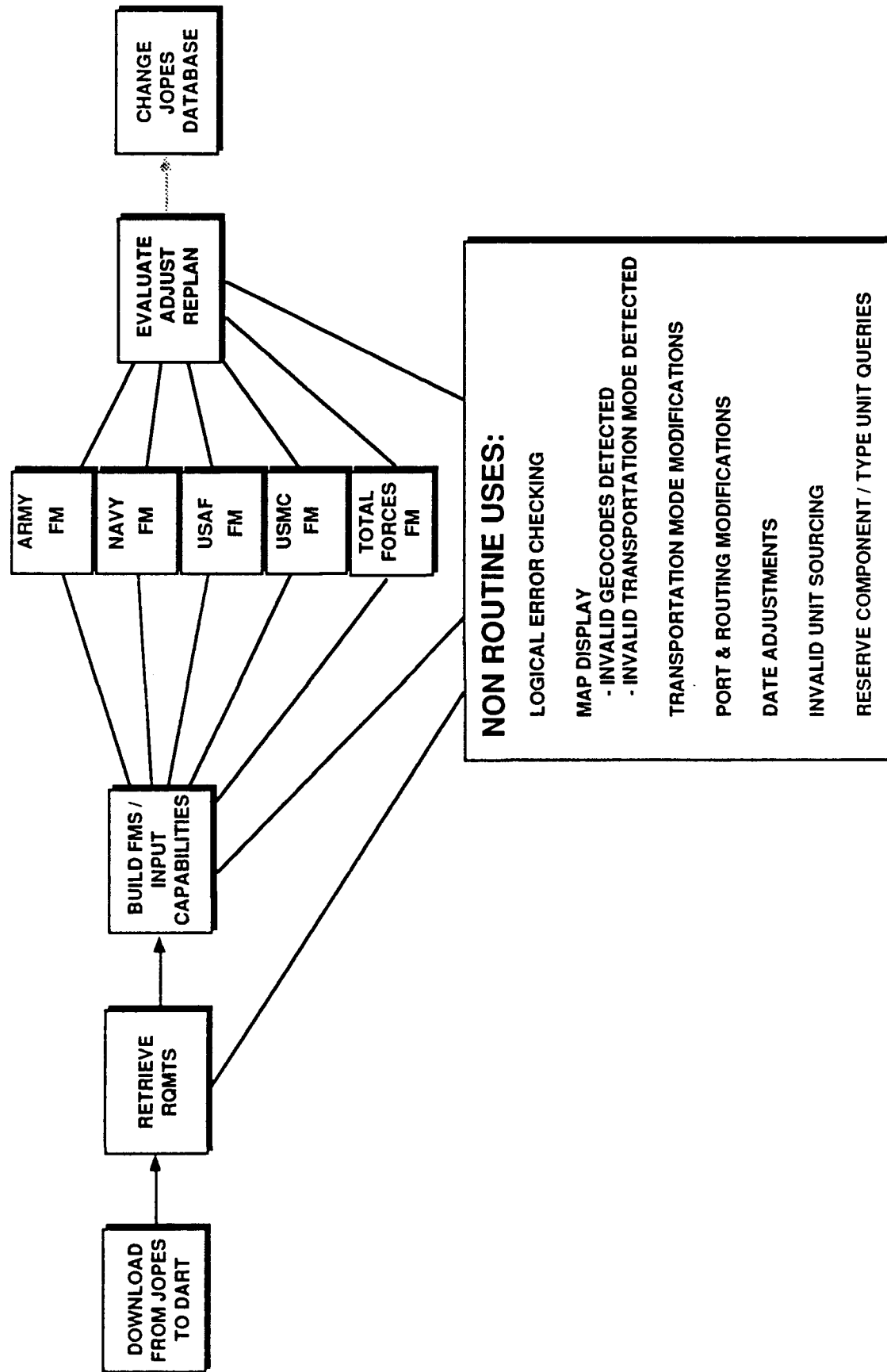


# **PACOM REFINEMENT CONFERENCE**

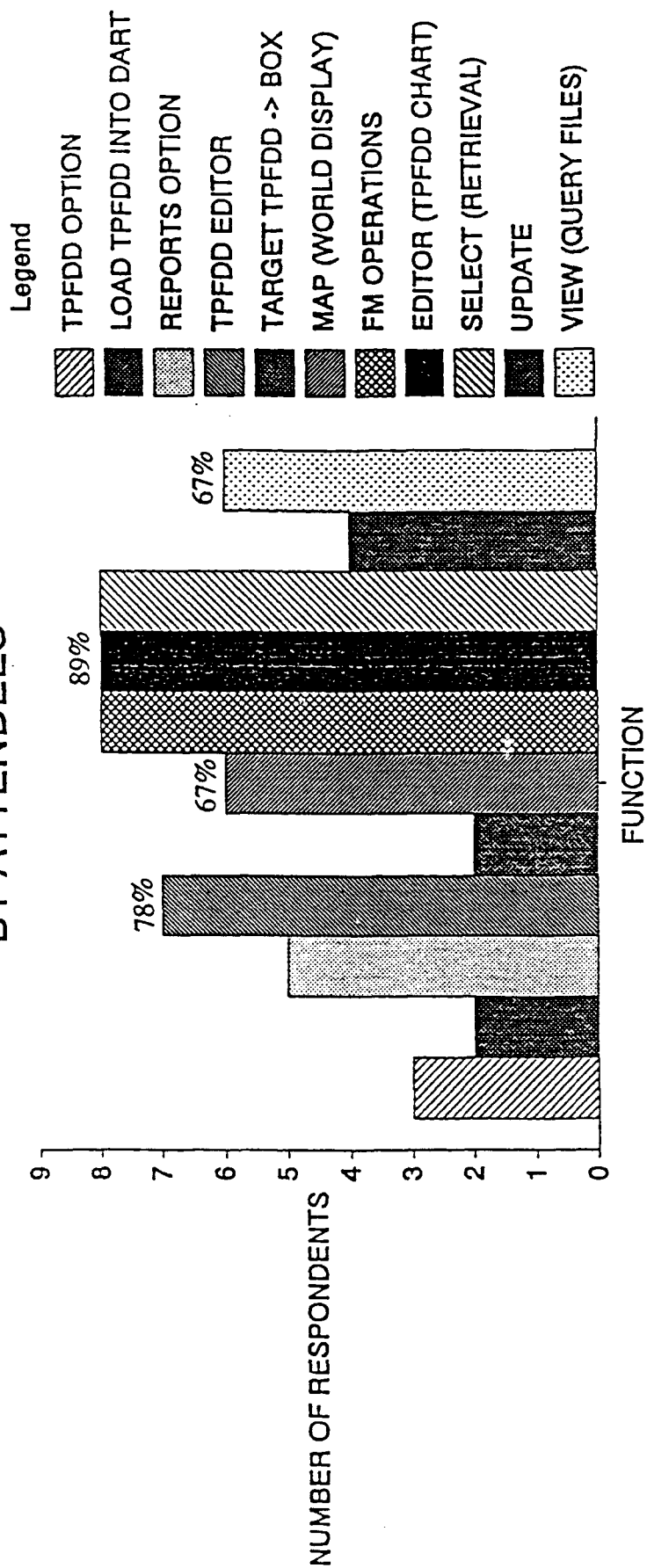
- ESTIMATE 40 ATTENDEES RECEIVED DART TRAINING OR DEMONSTRATIONS
- TRAINING/DEMOS FOCUSED ON TPFDD EDITOR
- CONFEREES USED DART TO:
  - RETRIEVE SPECIFIC REQUIREMENTS
  - BUILD TAILORED FORCE MODULES
  - ADJUST MVT RQMTS TO MEET OBJECTIVES
  - COMPARE MVT RQMTS AGAINST CAPABILITIES
- CONFERENCE SHOWED DART CAPABLE OF MULTIPLE USE ENVIRONMENT
- DART WELL RECEIVED BY PARTICIPANTS
  - APPROX 20 ATTENDEES SURVEYED ON DART USE AND FUTURE POTENTIAL
  - 100% RESPONDED FAVORABLY

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# PACOM REFINEMENT CONFERENCE

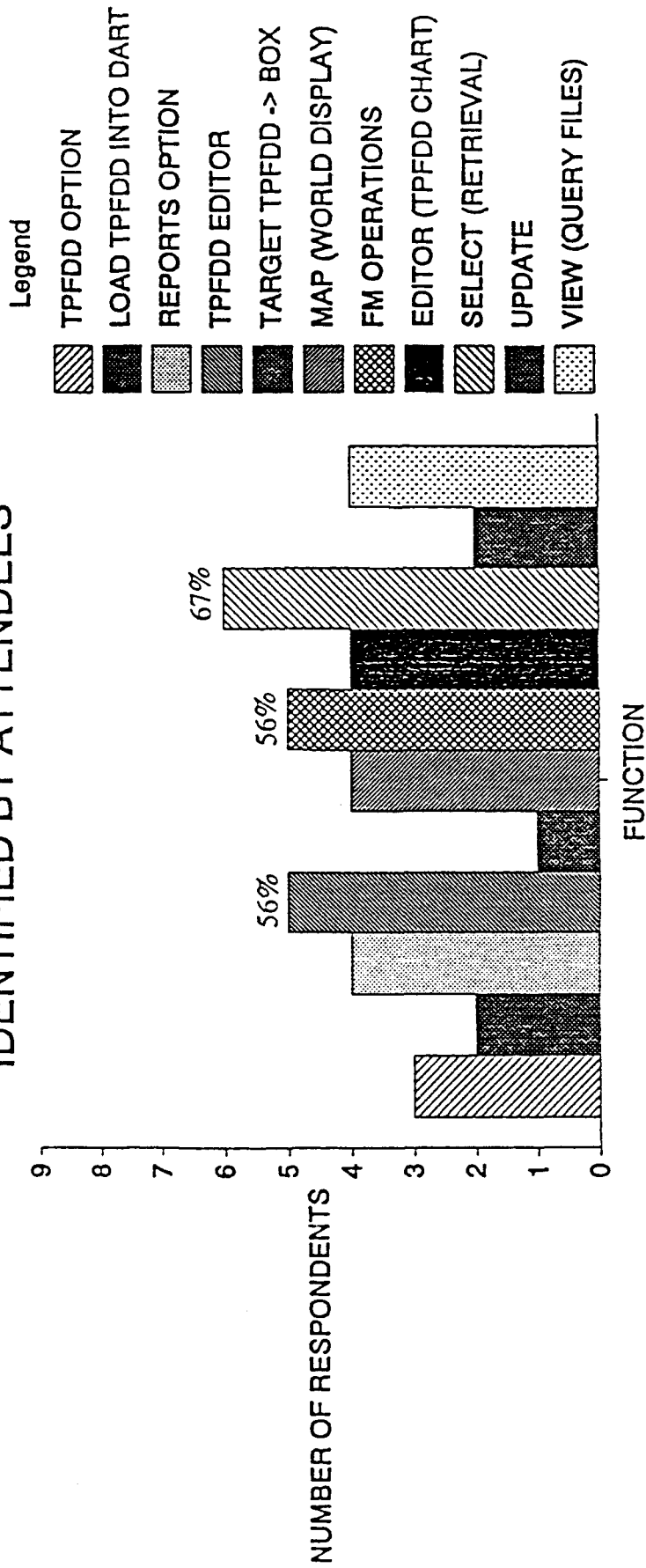


# DART FUNCTIONS USED BY ATTENDEES

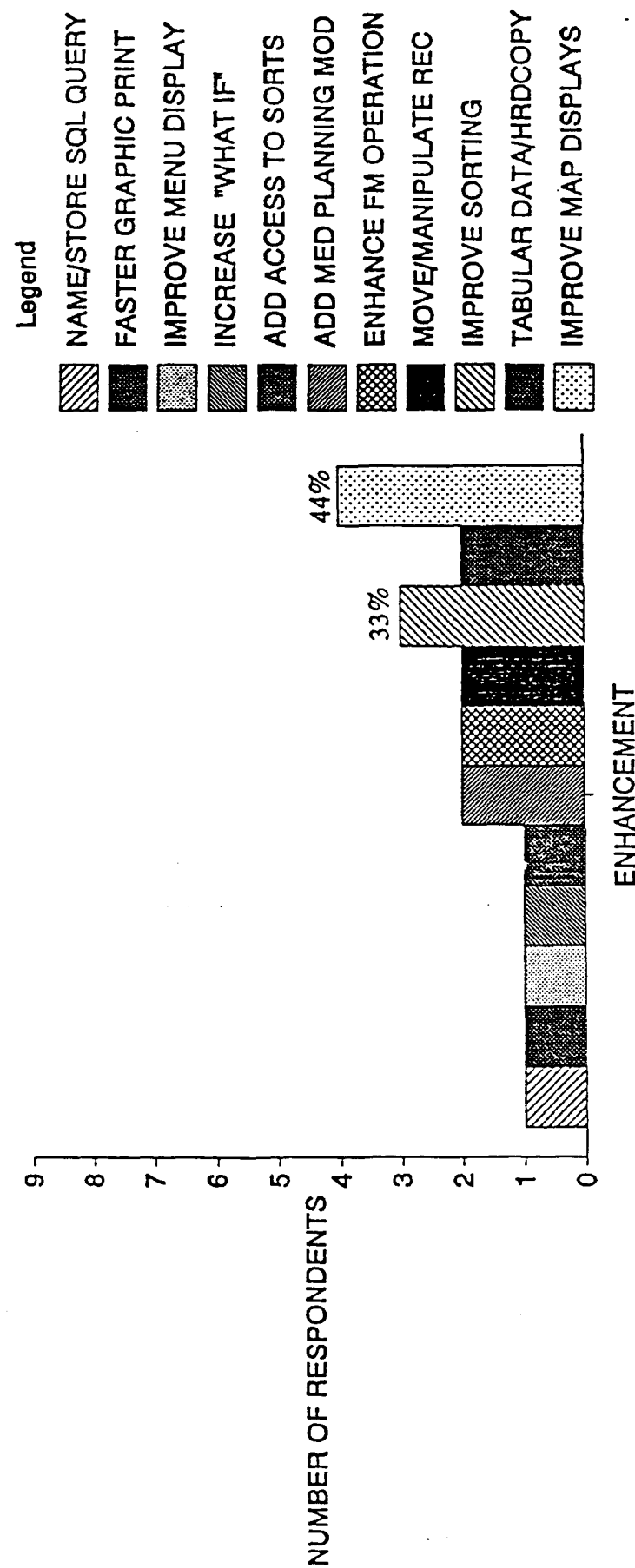


# DART'S MOST USEFUL FUNCTIONS

## IDENTIFIED BY ATTENDEES



# RECOMMENDED DART ENHANCEMENTS







# TPFDD Editor Conference User Feedback

Excerpts from TPFDD Refinement Conference User Comments:

- CONUS on Geoloc query menus
- New data fields (e.g., CRD)
- Show delta between FM capability and loads
- Detect Invalidated collections and FMs
- Input help
- Animate movements on map





# Build 2 Status

- Build 2 is completed and has been tested
- Numerous IR's remain to be resolved
- A release 2.1 is planned to be completed and tested by 26 July to go to Beta sites (MTMC and LANTCOM)
- Non-critical IRs will be fixed in Build 3
- SCP's will be considered for Build 3.1





# Build 2 Lessons Learned

- Build 2 DART analysis enhancements required tearing entire software module apart and putting it back together
  - new user interface
  - new data representation
  - integration of latest version of its graphics package
- Hard Requirement to maintain all Build 1 functionality
- Time to complete Build 2 dictated by need to field DART by July
- **RESULT:** Not all DART software completed by the beginning of testing and shortfalls were distributed throughout the module, consequently only limited testing could be completed until all software was integrated
- **CHANGES IN THE APPROACH FOR BUILD 3**
  - More conservative goals
  - Prioritization of enhancements
  - Enhancements are largely independent of one another



**DART**

**IN PROGRESS REVIEW**

**11 JULY 1991**

**SYSTEMS RESEARCH AND APPLICATIONS  
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# **DART**

## **INTRODUCTION**

- **USERS MANUAL**
- **TRAINING - PACOM REFINEMENT CONFERENCE**
- **TESTING**

# TESTING

- SCHEDULE
- MULTI-USER
- IRs/CPs
- IR REGRESSION
- DART AND IN-HOUSE RAPIDSIM COMPARE
- CONCLUSIONS/RECOMMENDATIONS

## TESTING SCHEDULE

- WEEK 1 (3 - 7 JUNE)
  - TPFDD EDITOR FUNCTIONS
- WEEK 2 (10 - 15 JUNE)
  - REGRESSION TEST TE AND FM GRAPH
  - DOWNLOAD/UPLOAD
  - FAST
  - REPORTS
- WEEK 3 (17 - 21 JUNE)
  - INFORMAL TESTING/PROGRAMMER ASSISTANCE
  - SUPPORTING REFINEMENT CONFERENCE

## TESTING SCHEDULE

- **WEEK 4** (24 - 27 JUNE)
  - RAPIDSIM FUNCTIONS
    - RAPIDSIM FUNCTIONS
    - MULTI-USER TEST
    - COMPARE WITH IN-HOUSE RAPIDSIM
- **WEEK 5** (1 - 3 JULY)
  - FINISH IN-HOUSE COMPARE
  - WRAP UP



# MULTI-USER TEST

USER 1 (SUSAN)	TE FUNCTIONS
USER 2 (W.T.)	REGRESSION TEST IRs
USER 3 (TAMMY)	ANALYSIS AND UTILITIES FUNCTIONS
USER 4 (JIM)	RAPIDSIM AND DART MAP FUNCTIONS
USER 5 (JOHN)	CREATE/LOAD/DELETE TPFDDs

# MULTI-USER IRS

<u>SUBJECT</u>	<u>IR NUMBER</u>
• UTILITIES - RETRIEVE SCREEN	42
• NO ESCAPE OPTION	41
• EDIT SITUATION	39
• FM MODEL RUNS	40
• GRAPHS	23,24,35,36,37,38
• EDIT SHIP ALLOCATIONS	21
• TE	19,22,25,26,27,28
• F11 REPORTS	29
• EDIT CHARACTERISTICS	20
• ANALYSIS	32,34
• DART MAP	30,31

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**DART  
BUILD II**

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TPFDD

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# RESULTS OF TESTING (IRs)

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## DART BUILD II

- TPFDD SUMMARY
  - .. UPDATE SUMMARY W/ "NIL" ( # 3)
  - .. SELECT TPFDD TIMEOUT ( # 4)
  - .. GET REQUIREMENTS DELAY ( # 9)
  - .. ERRONEOUS POL RQMTS ( # 63)
- SITUATION
  - .. SHIP ALLOCATION INPUT ( # 1)
  - .. "MEN AT WORK" ON ROUTES ( # 13)
  - .. SCENARIO DATA FILE ( # 43)
  - .. SHIP CARGO TYPE DISTRIBUTION ( # 53)
  - .. SLOW SHIP EDITS ( # 57)
- MODEL
  - .. EDIT MODEL SETTINGS W/O TPFDD ( # 7)
  - .. RAPIDSIM ABORT ON CARGO CAPABILITY ( # 11)
  - .. SQ FT CAPABILITY NOT AVAIL ( # 64)
  - .. REQS AND CHANNEL RPTS NOT AVAIL ( # 51)
  - .. EDIT MODEL SETTINGS AFTER IMPORT RAPIDSIM RESULTS ( # 61)

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## DART BUILD II

SUMMARY

**TPFDD**

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RESULTS

- ADD GEOLOC TO MAP ( # 2)
- EXPRESS RETRIEVAL FOR POE MISSING ( # 8)
- MAP ZOOM ERROR ( # 12)
- PAS ERRORS W/ ORACLE ( # 17)
- SQ FT VALUES FOR SPLIT SHIP PERSONNEL ( # 18)
- POD PRIORITY & PRIORITY ADD-ON MISSING ( # 52)
- DELETE TARGET TPFDD ( # 59)
- TUCHA OUTSIZED AND NAT VALUES ( # 60)
- ERRONEOUS POL RQMTS ( # 62)

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# DART BUILD II

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RESULTS

- WHITE SPACE ERROR ( # 14)
- CHANNELS NOT AVAIL ( # 16)
- "ZOOM" ON MENU BAR ( # 45)

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## DART BUILD II

- UNABLE TO SCROLL BACK ( # 5)
- MR SUMMARY PROBLEMS ( # 10)
- F11 REPORT FORMAT ERRORS ( # 15)
- NO CINS/PINS ON F11S ( # 16)

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# DART BUILD II

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TPFDD

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**RESULTS**

- ADD TEXT TO SCATTER GRAPH ( # 6)
- NO RESULTS CAUSES CRASH ( # 44)



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# DART BUILD II

SUMMARY

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RESULTS

- CLOSE ANALYSIS W/O ANALYSIS (#47)

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**DART  
BUILD II**

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## **RESULTS OF TESTING (MISCELLANEOUS)**

- UNIT ID FIELD IN SCENARIO FILE ( # 54)
- REQUIRE.DAT FILE FORMAT ( # 56)
- CAPS LOCK HANGUP ( # 58)

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# INCIDENT REPORTS

## • INCOMPLETE FUNCTIONALITY (14 TOTAL) IR NUMBER

•	RAPIDSIM REPORTS	51
•	ANALYSIS	37
•	DART MAP	31,45
•	F11 REPORTS	5
•	T IMING	9,26,57
•	TE	52,25,27,22,28
•	CAPACITY vs REQ GRAPH	23

## • ERROR/ABORT CONDITION (19 TOTAL)

•	EDIT MODEL SETTINGS	7,61
•	CAPS LOCK ERROR	58
•	ANALYSIS	44,47
•	UTILITIES RETRIEVE SCREEN	42
•	NO ESCAPE OPTION	41
•	CAPABILITY vs REQUIREMENT	24
•	TE	17,59
•	EDIT SITUATION	39
•	RUN RAPIDSIM	11
•	GRAPHS	6,32,37
•	DART MAP	2,12,14
•	SELECT TPFDD	4
•	SQ FEET CAPABILITY IN RAPIDSIM	64

## INCIDENT REPORTS (Cont)

• ERRONEOUS RESULTS	(20 TOTAL)	IR NUMBERS
•• .DAT AND .LST FIELDS		56,55,54
•• EDIT CHARACTERISTICS		20,43,53
•• FM MODEL RUNS		40
•• GRAPHS		35,36,38
•• EDIT SHIP ALLOCATIONS		1,21
•• UPDATE SUMMARY		3
•• VIEW TUCHA		60
•• TE		8,18,19
•• MR SUMMARY		10
•• DART MAP		13,30
•• F11 REPORTS		15,29
•• ERRONEOUS POL		62,63
• BUILD II FUNCTIONS MISSING	IR #16	
•• DISPLAY DESIGNATED CHANNELS		
•• NON UNIT RECORDS ON F11 REPORTS		

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## DART BUILD II

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### INHOUSE vs DART RAPIDSIM COMPARISON TESTING

- RESULTS ARE CLOSE
- HAMPERED BY
  - .. INTERMEDIATE FILE FORMAT & AVAILABILITY
  - .. SLOW, USER UNFRIENDLY DATA INPUT
- ERRORS NOTED
  - .. POL RQMTS CONTAIN WATER
  - .. VARIATIONS AMONG COMMODITIES
  - .. SHIP TYPE CAPACITIES NOT EDITABLE

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# DART vs Inhouse RAPIDSIM

Requirements Analysis	Inhouse	DART	Difference	Difference
	Rqmts	Rqmts	Absolute	Per Cent
	STONS	STONS	STONS	
Airborne	0	0	0	0.00%
Armor	24,601	24,601	0	0.00%
Infantry	42,457	42,457	0	0.00%
Mechanized	174,682	174,682	0	0.00%
Air Mobile	0	0	0	0.00%
Combat Support	111,036	111,036	0	0.00%
CS Support	222,937	223,006	69	0.03%
CBAC	10,555	11,039	484	4.59%
Air Force UE	27,881	28,179	298	1.07%
Marines	300,266	300,266	0	0.00%
Ammunition	464,345	464,345	0	0.00%
Resupply	336,926	336,926	0	0.00%
Navy UE	29,106	28,644	462	1.59%
POL	0	0	0	0.00%
PAX	410,950	412,168	1,218	0.30%
Delivery Analysis	Inhouse	Inhouse	Difference	Difference
	Rqmts	Delivered	Absolute	Per Cent
	STONS	STONS		
Airborne	0	0	0	0.00%
Armor	24,601	24,601	0	0.00%
Infantry	42,457	42,457	0	0.00%
Mechanized	174,682	174,682	0	0.00%
Air Mobile	0	0	0	0.00%
Combat Support	111,036	111,036	0	0.00%
CS Support	222,937	222,937	0	0.00%
CBAC	10,555	10,555	0	0.00%
Air Force UE	27,881	27,879	2	0.01%
Marines	300,266	300,266	0	0.00%
Ammunition	464,345	464,345	0	0.00%
Resupply	336,926	336,926	0	0.00%
Navy UE	29,106	29,106	0	0.00%
POL	0	0	0	0.00%
PAX	410,950	412,168	1,218	0.30%

# DART vs Inhouse RAPIDSIM

Results	General			Container			Ro/Ro			Total		
	Inhouse Delivered	DART Delivered	Diff Actual	Diff %	Inhouse Delivered	DART Delivered	Diff Actual	Diff %	Inhouse Delivered	DART Delivered	Diff Actual	Diff %
Airborne	0	0	0	0	0	0	0	0	0	0	0	0
Armor	834	2,894	-2,060	-247%	1,230	1,797	-567	-46%	22,537	19,910	2,627	12%
Infantry	1,910	4,864	-2,954	-155%	6,731	5,416	1,315	20%	33,777	32,138	1,639	5%
Mechanized	4,927	11,287	-6,360	-129%	10,655	15,069	-4,414	-41%	159,101	148,326	10,775	7%
Air Mobile	0	0	0	0	0	0	0	0	0	0	0	0
Cmbt Spt	2,081	1,291	790	38%	6,186	7,041	-855	-14%	71,991	71,926	65	0%
CS Support	14,641	18,559	-3,918	-27%	18,778	17,156	1,622	9%	130,388	128,093	2,295	2%
CBAC	2,509	6,532	-4,023	-160%	711	320	391	55%	7,335	4,187	3,148	43%
Air Force UE	1,140	1,175	-35	-3%	73	38	35	48%	0	0	0	0
Marines	14,103	8,800	5,303	38%	133,462	104,046	29,416	22%	137,308	172,027	-34,719	-25%
Ammunition	0	0	0	0	457,564	457,564	0	0%	0	0	0	0
Resupply	31,844	53,539	-21,695	-68%	294,694	272,999	21,695	7%	0	0	0	0
Navy UE	20,827	20,467	360	2%	6,887	6,785	102	1%	0	0	0	0
Total UE	94,816	129,408	-34,592	-36%	936,971	888,231	48,740	5%	562,437	576,607	-14,170	-3%
POL	0	0	0	0	0	0	0	0	0	0	0	0
PAX	0	0	0	0	0	0	0	0	0	0	0	0

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## DART BUILD II

### CONCLUSIONS

- INFORMAL TESTING DURING INTEGRATION
- OPERATIONAL TESTING DURING 5027 REFINEMENT
- BUILD II FUNCTIONS MISSING
- DART ANALYSIS USER INTERFACE NEEDS IMPROVEMENTS
- SYSTEM IS USEABLE

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## RECOMMENDATIONS

- MAKE NECESSARY REPAIRS
- DELAY NEW FUNCTIONALITY
- REGRESSION TEST REPAIRS
- IMPROVE COMMUNICATIONS FOR PERIODIC  
INFORMAL TESTING DURING DEVELOPMENT

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# **DART**

## **PLANNED ACTIVITY JULY**

- **PUBLISH USERS MANUAL**
- **PUBLISH TRAINING MANUAL**
- **PUBLISH TEST PLAN AND REPORT**
- **REGRESSION TEST BUILD 2 REPAIRS**
- **RE BETA MTMC AND LANTCOM**
- **DRAFT SYSTEM ADMINISTRATION MANUAL**
- **PREPARE FOR PHASE THREE ACTIVITY**

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# **USERS MANUAL**

- PRODUCED 2 INTERIM MANUALS
  - LANTCOM (BASED ON BUILD 1.H)
  - REFINEMENT CONFERENCE (DRAFT, BASED ON BUILD 2)
- BUILD 2 USERS MANUAL
  - 90% COMPLETE BASED ON CURRENT SYSTEM
  - NEED ABILITY TO MACIFY ANY DART SCREEN
  - NEED COMPLETE INFORMATION ON PENDING SYSTEMS CHANGES 2 WEEKS PRIOR TO DELIVERY OF MANUAL



# **Build 3 Approach and Overview**

- Build 3 as it was visualized on 23 May
- Build 3 as it visualized now
- Build 3 Prioritization and Approach
- Build 3 Milestones





# **Build 3 Approach and Overview**

- Build 3 as it was visualized on 23 May
- Build 3 as it visualized now
- Build 3 Prioritization and Approach
- Build 3 Milestones





## **Build 3 requirements ( from 23 May IPR)**

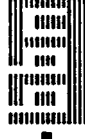
- Create/Edit Level 4 Cargo Detail
- Completion of Expanded Query Capability
- Fixing IRs
- Integration of SITAP into DART
- Integration of PFE into current build DART
- Small Enhancements to Force Module Management
- Incorporation of lessons learned (SCP) from Refinement conference
- Incorporate SCPs relating DART/FAST integration





## Build 3 requirements As Visualized Now

- Create/Edit Level 4 Cargo Detail (3.1)
- Completion of Expanded Query Capability (3.2) (expanded scope)
- Fixing IRs (3.3)
- Update RapidSim Capability (3.4) (new requirement)
- Integration of SITAP into DART (3.5) (expanded scope)
- Integration of PFE into current build DART (3.6)
- Small Enhancements to Force Module Management (3.7)
- TPFDD editor enhancements from Conf. (3.8) (expanded scope)
- Integration into GTN LDBD (3.9) ( new requirement)
- Transaction Capability for DART (3.10) (new requirement)
- DART Multi-user capability specification (3.11) (new requirement)
- Configuration Management (3.12) (new funded requirement)
- System Documentation (3.13) (new funded requirement)





## Build 3 Approach and Prioritization

- Give highest priority to fixing bugs and other problems that interact with fielding DART
- Take conservative approach to all new enhancements
- Maintain fallback positions on high risk enhancements
- Prioritize all enhancements and focus initially on highest priority items
- Put all individuals on time budgets to insure funds are left for final integration and testing

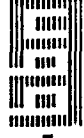






# Build 3 Milestones

- 15 June - Development begins
- 13 September - complete integration
- 16 September - Begin Acceptance Testing
- 28 September - Complete Acceptance Testing
- 28 September - Build 3 Turned Over to TRANSCOM





## Build 2.1: IR Resolution from Build 2

- Incomplete Functionality (14 Total)
  - 9 to be fixed or resolved in Build 2.1
  - 4 under investigation
  - 1 deferred to Build 3
- Error/Abort Condition (20 Total)
  - 11 to be fixed or resolved in Build 2.1
  - 7 under investigation
  - 2 deferred to Build 3
- Erroneous results (24 Total)
  - 12 to be fixed or resolved in Build 2.1
  - 11 under investigation
  - 1 deferred to Build 3
- Build 2 Functions Missing (2 Total)
  - 1 under investigation
  - 1 deferred to Build 3





# Build 3 Design (I)

**Title:** Create/Edit Level 4 Cargo (3.1)

**Approach:**

- User Interface
- Editing Functions
- Creation Functions
- Automatic Roll-up

**Status:** significant effort, medium priority





## Build 3 Design (II)

**Title : Expand Query Capability (3.2)**

**Approach:**

- Collection Sorting
- Stored Queries
- Query Editing
- Routine Retrievals
- F11 Reports ?????

**Status:significant effort, high priority (stored queries 85% complete)**





## Build 3 Design (III)

**Title:** Fixing Bugs (3.3)

**Approach:** Currently have defined bugs to be fixed from existing IR list

**Status:** Critical IRs will be fixed in build 2.1 by end of July





## Build 3 Design (IV)

**Title:** Update RapidSim Level Capability (3.4)

- Additional reports/graphs showing asset usage

**Approach:**

- Straightforward implementation

**Status:**

- Modest Effort, Low Priority
- Design 15-July to 1-Aug.
- Begin implementation 15 Aug if resources are available.





# Build 3 Design (V)

**Title:** Generic Pre & Post Processing for Transportation Models (3.5)

**Approach:**

- Concentrate on SITAP integration.
- Use generic capabilities built into the current DART interface where applicable.
- Use current DART analysis display capabilities where possible.
- Add generic capabilities to support SITAP where possible.
- Add SITAP specific functions as required.

**Status:**

- Significant effort, High priority, High Risk
- Initial interface should be viewed as a prototype version





# Build 3 Design (VI)

**Title:** Transportation Analysis Through PFE (3.6)

**Approach:**

- Augment DART movement requirements to support PFE.
- Modify PFE graphs to current DART version.
- Modify PFE situation to current DART version. (Most of the work)
- Modify PFE graphical Force Module / Movement Requirement display to current DART version.
- Modify PFE scheduler to use more than two priority levels, e.g., 10 or 100. (Optional, if resources are available)

**Status:**

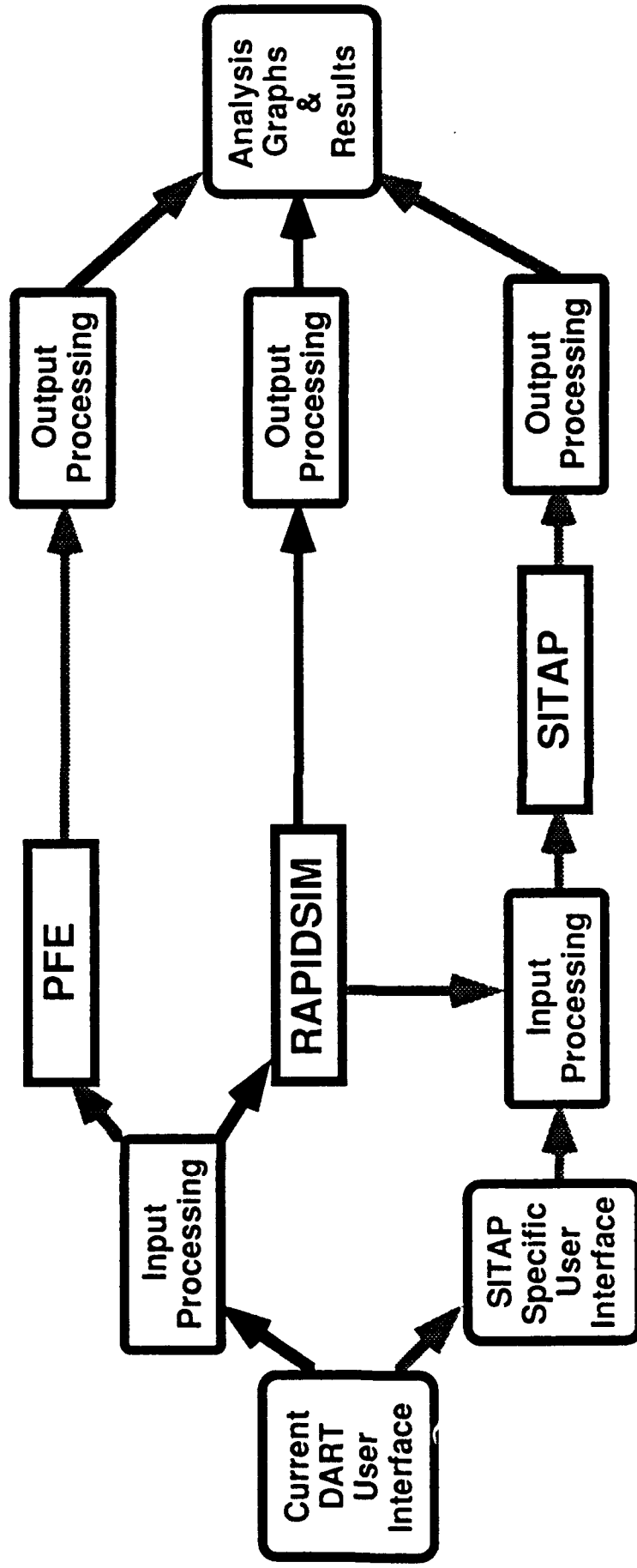
- Moderate Effort, High priority







# SITAP/PFE Integration





# Tenative Fielding Schedule

- 5 July CINC Initiative Funds for DART fielding approved
- 5 August CIF MIPR reach DARPA
- 15 August DART Fielding effort begins
- 15 August Hardware Ordered
- 20 August -5 September Site Surveys
- 15 August -30 September preparation for centralized training
- 30 September Build 3 complete
- 30 September - 15 October Centralized Training
- 15 October Hardware arrives and Build 3 is installed
- 20 October Fielding at first site
- two teams field DART at 6 to 8 sites, two to three weeks per site
- 15 January DART fielded at all sites



# Incident Report Regression Testing

IR #	Title	Status	Remarks
10	RAPIDSIM Air PAX Error		
12	Scenario File Save Error		
25	Save SETUP Abort		
33	Movement Rqmts Output		
34	RAPIDSIM Invalid FMID		
35	Changes to Display Map	Partial	
39	Menu Selection Convention	Still Exists	
41	Erratic RAPIDSIM Output Report		
42	RAPIDSIM Data Conflict		
43	ORACLE Hang on Power Loss		
44	Zero Ship by Port Error	Fixed	
45	Mixed Report Formats	Fixed	
46	Open TPFDD Editor Effects	Fixed	
53	TPFDD Name Table Update	Fixed	
54	Missing Concept of Ops Data	Fixed	
55	Errors following TPFDD Upload	Partial	
56	Renumber CIN/PIN Error	Fixed	
57	Yellow ULN Color Change	Fixed	
58	Offset Setup Menu	Fixed	
59	Utilities Menu Error	Fixed	O.B.E.
60	RAPIDSIM Access Error		
61	Combination Parameters Failure	Fixed	
62	Force Module Display Error	Still Exists	POL & Sq Feet Errors
63	SRF Sort Sequence Error	Fixed	
64	F11D Reports Errors	Still Exists	No Non-unit records
66	Zoom-Out Error		
67	Unnecessary RAPIDSIM Error Msgs		
68	Force Module Description Records	Still Exists	
73	RAPIDSIM Floating Point Exception		
74	DART/Inhouse RAPIDSIM Compare		
75	RAPIDSIM POL Comparison Error	Still Exists	Problem with Water
76	RAPIDSIM Parent Records Errors		
77	RAPIDSIM Prov Org Code Error		
79	In-Place Force Retrieval	Fixed	
80	On-Call Force Visibility	Fixed	
81	TPSN Field	Fixed	
82	MTon Values	Fixed	
90	Inaccurate Total Load Figures	Still Exists	POL & Sq Feet Errors
92	CIN/PIN Retrievals	Still Exists	
93	Classification Error	Fixed	
97	PIN Service Code Menu	Fixed	
98	ULN Retrieval Errors		
99	C-Day Offset Errors		
100	Write Error Continuation		
102	Multiple "And" Retrievals		
103	Username Abort Error		
104	Transport Color Code Error	Fixed	

# Incident Report Regression Testing

105	CIN Copy Error		
107	Security Class Entry	Fixed	
108	TPFDD Editor Exit Option	Fixed	
109	TPFDD Stop Option	Fixed	
110	DART Version Entry		
111	RAPIDSIM Results Legend		
112	In-List Wild Card Retrievals		Should be SCP
113	F11D/E Report Errors	Still Exists	
114	FM Compare Numbers Overlap	Fixed	User Education
115	Security Class "NIL" Error	Fixed	
119	TPFDD Data Not Shown	Partial	
120	RAPIDSIM Error Number Tracking		
121	RAPIDSIM Error Listing Display	Fixed	Function no longer Avail
122	Floating Point Lat/Long		
123	Sq Ft Calculation Error	Still Exists	
124	FRN Changes		
125	Graphics Printing Problems		
126	Summary Line Colors	Fixed	
127	FM Display Scrolling Error	Fixed	



## Build 3 Design (VII)

**Title: Force Module Management (3.7)**

**Approach:**

- Expanded and compressed display (more specification required)
- FM Description/Title Editing
- FM Relationship Display (more specification required)
- Change Cargo Options

**Status: Moderate effort, mixed priorities**





# Build 3 Design (VIII)

**Title:** TPFDD Editor Enhancements (3.8)

**Approach:**

- User Data Administration (SQL Forms)
- Retrieve on Geoloc Combinations ( more spec needed)
- Complete ULN information (more spec needed)
- Intelligent Editing

**Status:** moderate effort, medium priority





## Build 3 Design (IX)

**Title:** Workplan for DART integration into GTN LDBD

**Approach:** Consult and write up results

**Status:** moderate effort, low priority, begin work 15 Aug if resources available





# Build 3 Design (X)



**Title:** Transaction Interaction with JOPES (3.10)

**Approach:**

- Concentrate on providing upload of TPFDD changes made by DART
- Obtain JOPES transaction format specification
- Modify/reimplement existing tpdump functionality
- Understand ramifications for Update Control
- Develop support code and scripts

**Status:** significant effort, high priority





## Build 3 Design (XI)

**Title: Workplan for DART Multi-User Support**

**Approach: Continue recurring discussion and analysis of the DART Multi-user problem, write up approach**

**Status: moderate effort, low priority, work to begin August 15 if possible**





# Overview of the DART Fielding Effort

- Top Level Schedule
- Critical Components of the Fielding Effort





# Critical Components of the DART Fielding Effort

- Rapid acquisition of hardware for each selected site and rapid deployment based on MTMC and LANTCOM experience. One to two weeks of on site training included
- Centralized Training at SRA, multiple courses provided depending on size of DART community
- Installation of DART at additional sites and upgrade assistance and training for DART at existing sites provided at site's initiative and cost
- User Support Hotline at TRANSCOM based on MTMC/LANTCOM experience and remote secure call up of sites for monitoring and assistance
- A DART user group and system engineering to address user problems
- Software maintenance to fix bugs and architectural maintenance to keep DART from stagnating
- Configuration Management centered at USTRANSCOM

• System Documentation in addition to user documentation



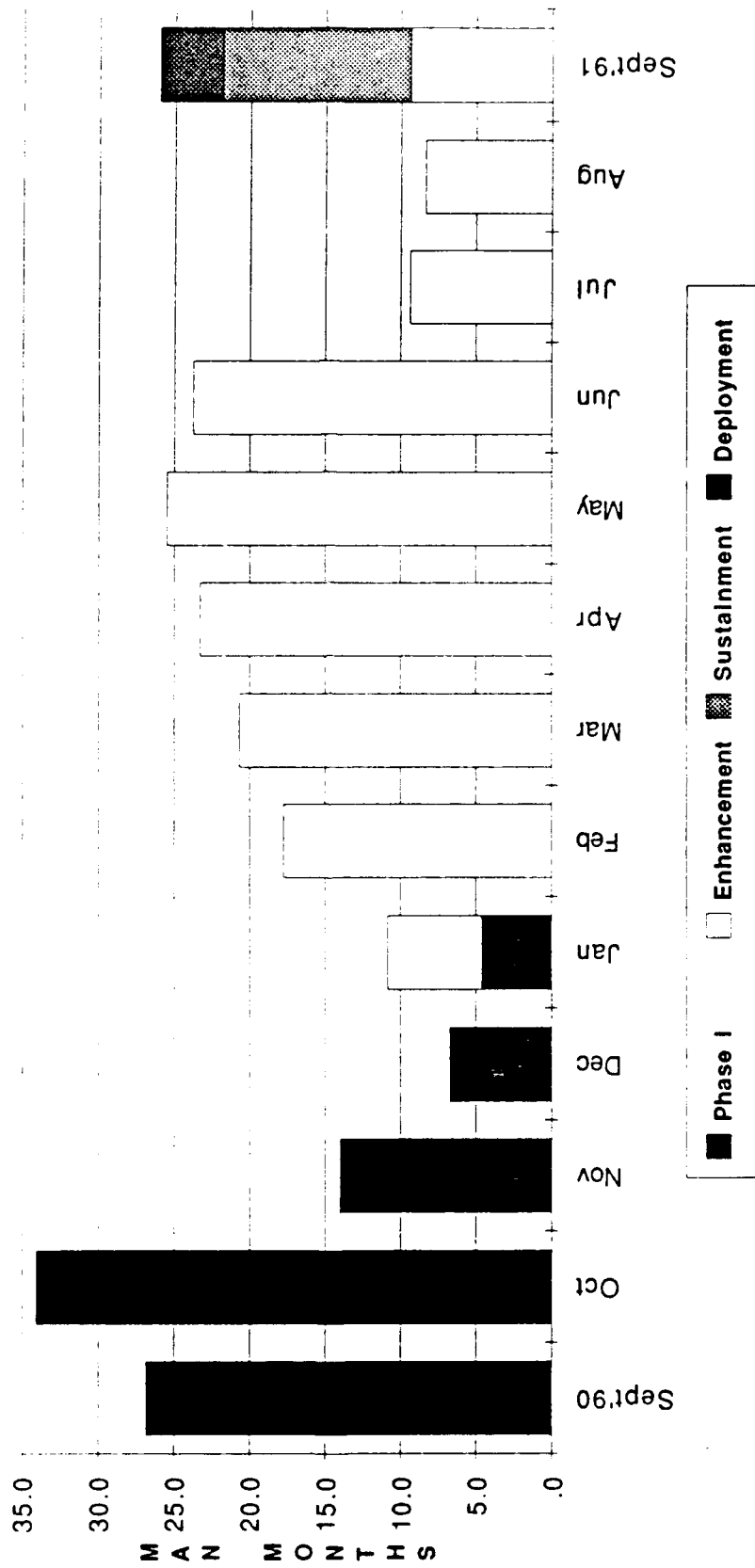


# Management Report

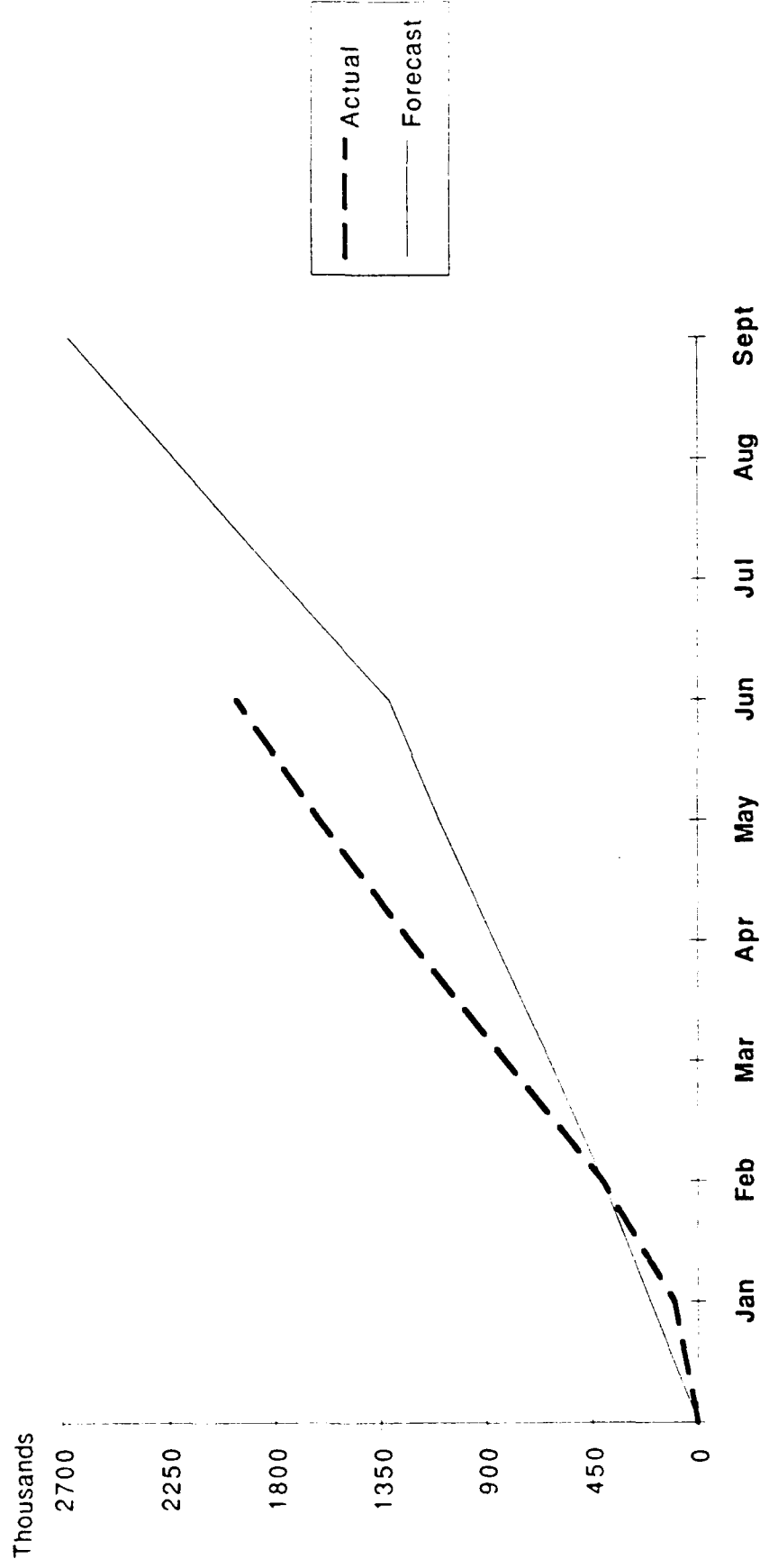
- Financial Status
- Project Schedule between now and 31 August



# DART LEVEL OF EFFORT



DART Phase II  
Contract No. MDA972-90-C-0074  
Actual v Forecast of Expenditures





# **DART Program Schedule**

## **25 May to 31 August**

- 17 July to 26 July Global War Game Support
- 24 July Build 2.1 begin testing
- 26 July Build 2.1 complete testing
- 29 July to 2 August Distribute DART to Beta sites
- 1 August PMR
- 15 July to 15 August - continued DART fielding planning
- 15 August DART fielding effort begins





# 28 August IPR Agenda

- Action Items (Ragler)
- TRANSCOM Update
  - Future Roadmap (Rawcliffe)
  - Distribution Plan (Ragler)
  - Configuration Management (Ragler)
- Build 2.1 Status (Estrada)
- Build 2.1 Test Results (Sporn)
- Build 3 Status (Ton, Berliner, Tiffany)
- Build 3 Training, Testing, and Documentation (Mosley)
- DART - Fast integration (CSC)
- Floor Business (Rawcliffe)
- Recap Open Issues (Rawcliffe)







# Build 2.1

## Overview

- Although Build 2 as completed and tested is usable and has no "show stoppers" , it contained a large number of unresolved Incident Reports
- Build 2.1 was defined to fix the major IRs
- Software for Build 2.1 was completed and internally tested by 2 August
- SRA acceptance testing performed on August 6,7
- Development and testing successfully completed



# **BUILD 2.1 TESTING**

**6-7 AUGUST '91**

- **SRA WITH BBN COORDINATION**
- **REGRESSION TESTED BUILD II IRS**
- **NO ABORTS**
- **TWO MINOR ERRORS -- IMMEDIATELY ADDRESSED**
- **MINI ANALYSIS REPORT SUBMITTED TO BBN**

# **BUILD 2.1 TESTING**

**6-7 AUGUST '91**

- **REGRESSION TEST RESULTS**
  - **64 IRs (SOME WITH MULTIPLE PARTS)**
    - **41 CORRECTED/RESOLVED**
    - **24 UNCHANGED**
    - **2 IMPROVEMENTS**
    - **4 COULD NOT DUPLICATE**



# Build 3 Requirements

REQUIREMENT	PRIORITY	STATUS
• Create/Edit Level 4 Cargo Detail	Medium	not started
• Expanded Query Capability	High	partially completed
• Fixing IRs	High	in progress
• Integration of SITAP into DART	High	demo today
• Integration of PFE into current build DART	High	will be completed
• Small Enhancements to Force Module Management	Mixed	not started
• TPFDD editor enhancements from Conf.	Medium	selected items done
• Integration into GTN LDBD	Low	not started
• Transaction Capability for DART	High	in progress
• DART Multi-user capability specification	Low	not started
• Configuration Management	High	will be completed
• System Documentation	High	intense effort





# SITAP

*Demo - after  
PMR*

## Approach:

- Use generic capabilities built into the current DART interface where applicable.
- Use current DART analysis display capabilities where possible.
- Add generic capabilities to support SITAP where possible.
- Add SITAP specific functions as required.

## Status:

- Demonstration of preliminary version given this afternoon
- Initial interface should be viewed as a prototype version





# PFE Integration

- Augment DART movement requirements to support PFE. (Complete)
- Modify PFE graphs to current DART version. (Possibly deferred)
- Modify PFE situation to current DART version. (Will be completed)
- Modify PFE graphical Force Module / Movement Requirement display to current DART version. (Will be completed)
- Modify PFE scheduler to use more than two priority levels, e.g., 10 or 100. (Deferred)





# Transaction Processing with JOPES - Status

- Concentrating on providing upload of TPFDD changes made by DART
- Writing transactions for FMs, partial Unit records
- Need more:
  - transaction format specification
  - test data
  - confirmation of JOPES transaction dumping capability.

Status: significant effort, high priority



**DART**

**IN PROGRESS REVIEW**

**28 AUGUST 1991**

**SYSTEMS RESEARCH AND APPLICATIONS  
CORPORATION**

**SRA**  
CORPORATION



# **TRAINING**

- **SENIOR-OFFICER ORIENTATION**
  - **JCS-J6**
  - **JCS-J7 (PSD & CPD)**
  - **USTC J5**
- **USTC-J3/4 ORIENTATION**
- **RE-BETA MTMC**
- **DEVELOPED AUTOMATED SYSTEM BRIEFING**
- **PROTOTYPE SYSTEM VIDEO**

**SRA**  
CORPORATION

# **TRAINING**

- **SENIOR-OFFICER ORIENTATION
  - JCS-J6
  - JCS-J7 (PSD & CPD)
  - USTC J5**
- **USTC-J3/4 ORIENTATION**
- **DEVELOPED AUTOMATED SYSTEM BRIEFING**
- **PROTOTYPE SYSTEM VIDEO**

# DOCUMENTATION

- USERS MANUAL
  - BUILD II VERSION DELIVERED 1 AUGUST
- SYSTEM ADMIN MANUAL
  - DRAFT TO MTMC (*LANTCOM*)
- TEST ANALYSIS REPORT
  - AWAITING DISTRIBUTION
- TRAINING MANUAL
  - OUT ON 29 AUGUST

# **IRs/SCPs**

- **IR/SCP DATA PROVIDED TO TCJ6**
- **NO NEW IRS**

# **PROPOSED ACTIVITIES**

- **TESTING**
  - **PREPARE AND EXECUTE BUILD III TEST**
- **TRAINING**
  - **DELIVER TRAINING MANUAL BY 8/29**
- **USERS MANUAL**
- **RE-BETA LANTCOM**
- **PREPARE FOR PHASE III (\$ AND TASKING)**